

The Lake County Watershed Development Ordinance (WDO) [[LINK]] requires a **Watershed Development Permit (WDP)** for development activities that impact¹ wetlands or their buffers.

****This packet does not address stormwater management, water quality, sediment control or other provisions of the WDO.**

Please refer to the WDO for questions concerning those issues.

You'll need a "WDP" for development in:



- Waters of the U. S. ("WOUS")
- Isolated Waters of Lake County ("IWLC")
- Buffers to WOUS or IWLC

➤ **Are Wetlands on Your Site?**

The first step is to find whether regulated wetlands/waters exist on your site. This guide provides a general overview. In most cases, a wetland delineation² will probably be necessary.

- Does the LCWI (Lake County Wetland Inventory) show a wetland on the property?
 - No --→ Does the site have a depression, contain hydric soils or hold water?
 - No → probably not a wetland.
 - Maybe → could be a wetland*
 - Yes → might be a wetland*
 - Yes → Does it have a depression, contain hydric soils and wetland plants?
 - No → might be a wetland*
 - Maybe → probably a wetland**
 - Yes → highly likely a wetland**

Who Does Wetland Delineations?

So who does wetland determinations and how do I contact them? The WDO requires that wetland determinations (and WDP applications) be conducted by, or under the supervision of, a "Certified Wetland Specialist". The SMC maintains an active list of CWSs available on the SMC web site at [[LINK]] or Attachment 1. Delineations on farmed lands have different requirements (see below).

 Y N: Is the site farmed now or in the last 5 years; If YES, then you may need a Natural Resources Conservation Service (NRCS) Wetland Conservation Determination. Contact the NRCS at: (847) 223-1056, and are located at 100 N. Atkinson Road, Suite 102-A, Grayslake, IL 60030

* Project needs wetland delineation or a Letter of No Impact (LONI) see Page 4. **Project requires a wetland delineation

➤ **Permitting → Who Issues the WDP?**

Circle one: Municipality / SMC / LCPBD³

Municipality: _____ ☐ Standard Certified (stormwater, etc.) ☐ IWLC Certified
☐ Non-Certified

☐ Apply to the Municipality for WDP. Contact the Municipality's Enforcement Officer:

_____. Phone Number: _____

☐ Municipality requires SMC's authorization for IWLC impacts prior to WDP Issuance! → Apply jointly to both the Municipality and SMC

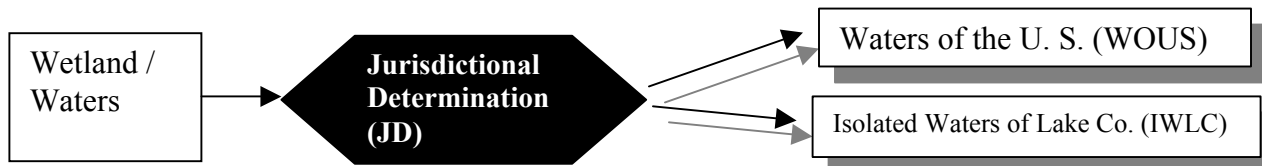
¹ Wetland impact defined as IWLC or WOUS that are hydrologically disturbed or otherwise adversely affected by flooding, filling, excavation, or drainage which results from implementation of a development activity.

² A wetland delineation is an on-site investigation to determine and flag the boundaries, extent, function, and quality of all wetlands on a site using the U. S. Army Corps of Engineers (USACE) manual. Wetlands contain a predominance of wetland plants, are sometimes flooded or saturated, and contain hydric soils.

³ Lake County Planning Building and Development (LCPBD). Contact them at 847/377-2600. They are located at the Lake County Building, 18 N. County Street, Waukegan, IL 60085

➤ **Who Regulates the Wetland? Or, What is a Jurisdictional Determination?**

If there are wetland/waters on your site, the next step is to determine what agency regulates them. Waters and wetlands within Lake County are either regulated under the federal Clean Water Act administered by the U.S. Army Corps of Engineers (USACE) or by the WDO, administered by SMC. A jurisdictional determination (“JD”) establishes which waters/wetlands the Corps or Lake County regulates. By default, the wetlands/waters not regulated by the USACE, are considered IWLC. For some sites, both WOUS and IWLC may exist on the same site!



You have two options for the JD:

1. Request a JD from USACE
2. Request a Preliminary JD from SMC or LCPBD

A Preliminary JD works the same as the USACE JD, but the USACE retains ultimate authority to determine which waters/wetlands on a site are under jurisdiction of the federal Clean Water Act. You may request a final jurisdictional determination from the USACE or apply for a permit from the USACE if your proposed project impacts WOUS. For IWLC, SMC will not require a final USACE determination to review the proposed site development under the wetland provisions of the WDO.

❖ To apply for a Preliminary JD by SMC, complete the “JD/Boundary Verification Form” Attachment 2 [[LINK]].

❖ To apply to the USACE, contact Mike Murphy at (312) 846-5538; or by email: michael.j.murphy@lrc02.usace.army.mil or mail to:
U.S. Army Corps of Engineers
Chicago District, Regulatory Branch
111 North Canal Street, Chicago, IL 60606

.....Other related issues:

* Confirm Wetland Boundary – For some projects, developers need to have the wetland boundary confirmed before site layout. Use SMC’s JD/Boundary Verification form referenced above for IWLC. For WOUS – contact the USACE at the number above.

* What if USACE says it’s not a WOUS, but it doesn’t meet the technical definition for IWLC? (See Below)

→Request a Preliminary JD from SMC (We’ll evaluate whether the area is IWLC or not)

Isolated Waters of Lake County (IWLC): All waters such as lakes, ponds, streams (including intermittent streams), farmed wetlands, and wetlands that are not under U. S. Army Corps of Engineers jurisdiction.

- A. The limits of the Isolated Waters of Lake County extend to the ordinary high water mark or the delineated wetland boundary.
- B. Isolated Waters of Lake County exclude permitted excavations created for such purposes as: stormwater conveyance, detention/retention areas constructed as part of a stormwater management system, recreation, stock watering, irrigation, settling basins or wastewater treatment systems and roadside ditches. Also excluded are areas created by incidental construction grading that are exempt per Article IV Section A.2. of this ordinance.
- C. Compensatory wetland mitigation created to meet the requirements of this Ordinance or Section 404 of the Clean Water Act is not excluded.

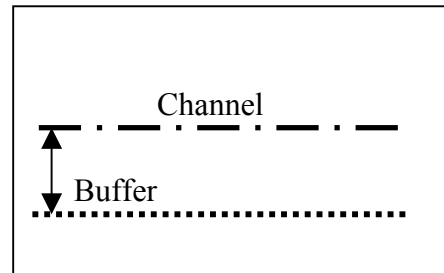
What are Buffers ?

The WDO requires Buffer⁴ areas adjoining all areas defined as either WOUS or IWLC. The width of the buffer depends on the type and quality of the WOUS or IWLC. The WDO requires that buffer areas either be placed in outlots, or be deed restricted.

Buffer Requirements Summary:

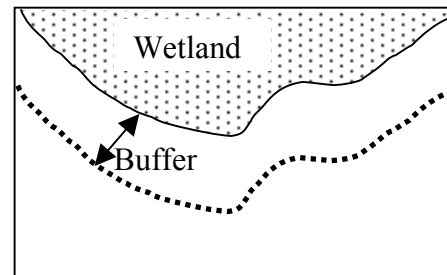
For channels: (extend along each side):

- 50-feet for: watershed > 20-acres, < 1 sq. mile
- 30- feet for: watershed > 1 sq. mile
- 100-feet for: streams with an Index of Biotic Integrity (IBI) greater than 40



For water bodies or wetlands:

- 30-feet for > 0.33 ac., < 1 ac.
- 40- feet for: > 1 ac., < 2.5 ac.
- 50-feet for: > 2.5 acres
- 100-feet for: High Quality Aquatic Resource (HQARs) e.g., ADID wetlands etc.



What is “Buffer Averaging”?

The buffer width for a development site may be varied to a minimum of ½ of the buffer width required, upon approval of the Enforcement Officer, provided that the total buffer area required is achieved adjacent to the WOUS or IWLC being buffered. The consultation process of the IDNR or U.S. Fish & Wildlife Service may override the ability to average buffer areas upon approval of the Enforcement Officer. For example see Alternative 3 below.

What Work is Allowed In Buffers?

All buffer areas shall be maintained free from development including disturbance of the soil, dumping or filling, erection of structures and placement of impervious surfaces except as follows:

- (a) A buffer area may be used for passive recreation (e.g., bird watching, walking, jogging, bicycling, horseback riding and picnicking) and it may contain pedestrian, bicycle or equestrian trails.
- (b) Structures and impervious surfaces (including trails, paths) may occupy a maximum of twenty (20) percent of the buffer surface area provided the runoff from such facilities is diverted away from the Waters of the United States or Isolated Wetlands of Lake County or such runoff is directed to enter the buffer area as unconcentrated flow.
- (c) Utility maintenance, construction of stormwater facilities and maintenance of stormwater facilities shall be allowed.
- (d) Boat docks, boathouses and piers shall be allowed
- (e) Buffer areas hydrologically disturbed by allowing construction or as part of a revegetation plan shall be revegetated using the Native Plant Guide for Streams and Stormwater Facilities in Northeastern Illinois, NRCS, et al., (as amended) as a minimum standard.

⁴ buffer: An area of predominantly vegetated land to be left open, adjacent to drainageways, wetland, lakes, ponds or other surface waters for the purpose of eliminating or minimizing adverse impacts to such areas [WDO Appendix A].
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WDO Requirements for Development Impacting Wetlands/Waters:

- ☐ Letter of No Impact (LONI): SMC will provide a Letter of No Impact (LONI) after an investigation and field visit confirm that a development will not impact wetlands/waters. *No additional wetland submittal requirements required after LONI issued.* LONIs are issued for:
- ❖ Confirmation that no wetland/waters exist on the site (sometimes a wetland investigation is submitted as evidence)
 - ❖ Development entirely avoids wetland and buffer impact (we'll need site plans to confirm this)

LONI Checklist: We need the following information

Site Plans →

- ☐ Existing and developed conditions contours – Limits of Grading or Clearing
- ☐ Regulatory Floodplains (if any)
- ☐ Wetland boundary locations
- ☐ Buffer locations
- ☐ Septic field locations

- ☐ For impacts to WOUS: Contact the USACE and submit a Joint 404/401 Application Form. Refer to the Submittal checklist [\[\[LINK\]\]](#) Attachment 3.

Generally, projects can fill wetlands up to 0.25 acre without compensatory mitigation¹. The USACE applies a mitigation replacement ratio of 1.5:1 (1.5 acres of replacement for 1 acre of impact) to 3:1 for projects that exceed the 0.25 acre threshold. The USACE makes final impact/replacement determinations.

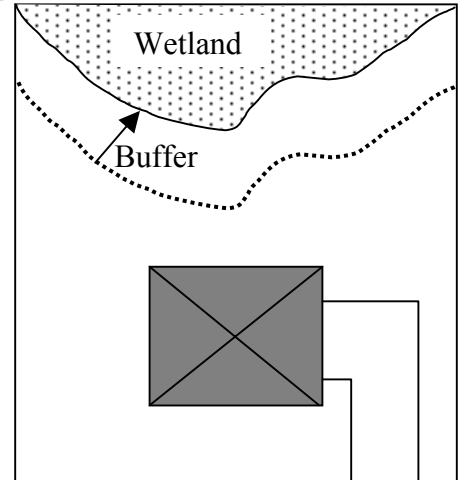
- ☐ For impacts to IWLC: Contact the SMC/Municipality for a WDP Application Form. Refer to the Submittal checklist [[LINK]] Attachment 3. Following are Examples and associated requirements:

Alternative 1: Avoid All IWLC Wetland and Buffer Impact

Your project's footprint (includes all grading) does not encroach the edge of the wetland or buffer. No impacts to wetland hydrology.

- Request a LONI from SMC as described on Page 1. No other submittal requirements apply.

*Note, if development encroaches upon the buffer, following apply:
 WOUS: a letter from the USACE may be required
 IWLC: development plans should show buffer averaging and Deed restriction.



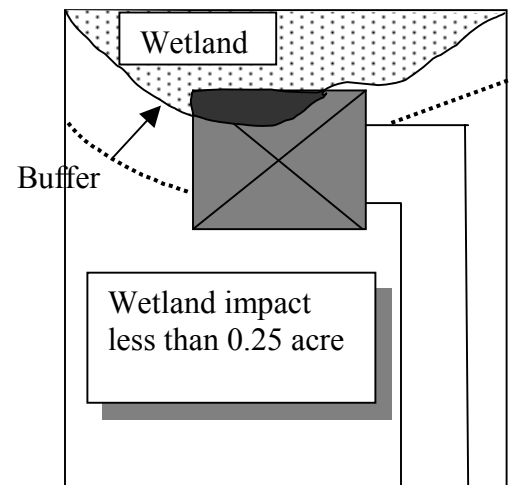
Alternative 2: Impact less than 0.25 acre to IWLC Wetland

Your project's footprint encroaches slightly upon the flagged wetland boundary. Impact is less than 0.25 acre and does not require compensatory mitigation.

*does not apply to HQARs (high quality areas) if so, = Cat. III.

**Note buffer width increased on left side to compensate for "pinching-in".

- Apply for a Category-I Authorization, see checklist
 * Single Family Home Application Fee = \$450
 * All Others, Fee = \$1,500



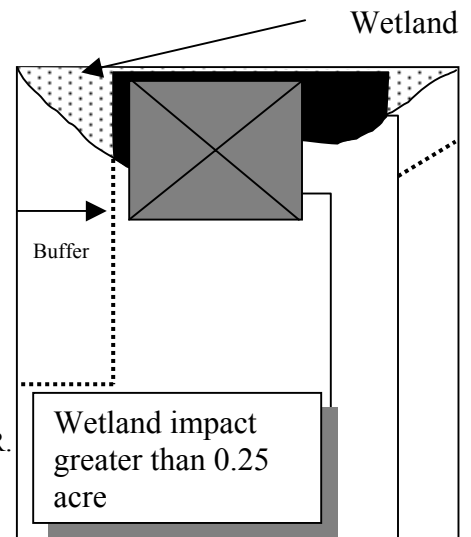
Alternative 3: Impact greater than 0.25 acre to IWLC Wetland

Your project's footprint impacts greater than 0.25 acre of the Flagged wetland boundary

MITIGATION REQUIRED (See "Mitigation" section)

- Apply for IWLC authorization:

- Category-I for impacts up to 1 acre of non-HQAR IWLC
- Category-II for impacts of greater than 1 acre, less than 2 acres of non-HQAR IWLC
 - Narrative on avoidance, minimization
- Category-III for impacts of greater than 2 acres or impact to HQAR.
 - Narrative on alternative measures taken, in sequence, to avoid and minimize IWLC impacts before mitigation considered
- Category-IV for restoration projects



➤ Mitigation Requirements for IWLC Impacts

The WDO requires compensatory wetland mitigation for impacts to IWLC greater than 0.25 acre.

Replacement Ratios

$$\frac{\text{(Approx. Impact Acreage)} \times \begin{matrix} 1.5 \text{ (non-HQAR impacts)} \\ 3.0 \text{ (HQAR Impacts)} \\ 6.0 \text{ (After the fact)} \end{matrix}}{\text{(Required Mitigation Acreage)}} = \text{Replacement Ratios}$$

Mitigation Options: The WDO requires mitigation that can be in various forms such as purchasing credits from a mitigation bank, on-site creation, off-site creation and enhancement. All mitigation must take place within Lake County. The following table describes the mitigation requirements:

Replacement Acreage 1.5 acres or less: (must be in sequence^^)	Replacement Acreage greater than 1.5 acres: (must be in sequence)
<ol style="list-style-type: none"> In the same watershed as wetland impact: <ol style="list-style-type: none"> A USACE Approved Wetland Mitigation Bank; or a SMC Approved Wetland Mitigation Bank; or Off-site wetland creation. Outside of the watershed (at double the required mitigation acreage): <ol style="list-style-type: none"> A U.S. Army Corps Approved Wetland Mitigation Bank; or a SMC Approved Wetland Mitigation Bank; or Off-site creation SMC Wetland Restoration Fund 	<ol style="list-style-type: none"> On-site wetland mitigation In the same watershed as wetland impact: <ol style="list-style-type: none"> A USACE Approved Wetland Mitigation Bank; or a SMC Approved Wetland Mitigation Bank; or Off-site wetland creation. Outside of the watershed (at double the required mitigation acreage): <ol style="list-style-type: none"> A U.S. Army Corps Approved Wetland Mitigation Bank; or a SMC Approved Wetland Mitigation Bank; or Off-site creation SMC Wetland Restoration Fund

^^ Allowance to the next lower step is permitted only when justified through sequencing specified in Article IV Section E.2.c.9 and 10 or when the higher step is not available:

Wetland Mitigation Banks - A mitigation bank is an entity that sells credits to applicants for development that impacts wetlands to satisfy the compensatory mitigation requirement. Typically the costs are +/- \$60,000/acre and up.

Who do you contact? → refer to the USACE website at: <http://www.lrc.usace.army.mil/co-r/ofsitopt.pdf>

Other Mitigation Requirements:

- Wetland creation not allowed to occur within areas currently comprised of wetlands or forested areas.
- Farmed Wetlands: Enhancement of farmed wetlands may be used for up to 80% of the mitigation requirement (must meet minimum size requirement)
- Non-Farmed Wetlands: Enhancement of existing non-farmed wetlands may be credited at up to 25% of the enhanced wetland acreage completed, provided that the wetland impact acreage created is at a minimum 1:1 ratio.

➤ **Wetland Hydrology Provisions for IWLC:**

To ensure that IWLC to be preserved on or adjacent to a site remain functional after development, the proposed design shall maintain between 80% and 150% of the existing condition runoff volume to the proposed IWLC up through the 2-year, 24-hour storm event. If this hydrology requirement is not met, the entire IWLC is assumed impacted and mitigation may be required.

The wetland hydrology provisions usually will apply if you answer “Yes” to either of these questions:

O Yes O No → Will your development leave only a remnant IWLC (not fill the wetland entirely)?

O Yes O No → Does it make the watershed smaller to the IWLC?

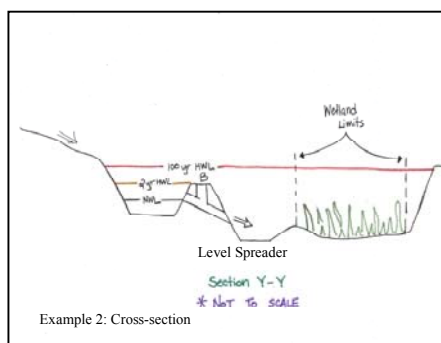
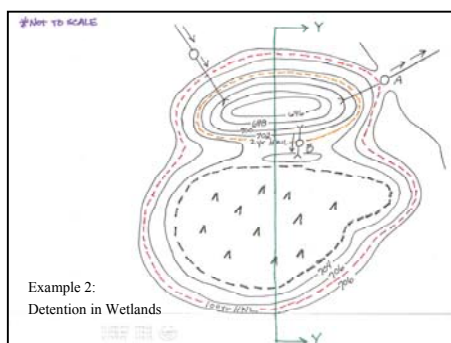
- ☐ To comply with the hydrology requirement, a hydrologic analysis is required for all existing IWLC to be preserved on and adjoining the development site, including the remaining portions of any IWLC that will be partially impacted by filling, excavation, etc.

➤ **Can Wetlands Be Used for Detention ?**

For WOUS – Contact the USACE

For IWLC –

1. Detention shall only be allowed in the following Isolated Waters of Lake County and are not considered a wetland impact:
 - (i) Farmed wetlands
 - (ii) Non-farmed wetlands when the existing vegetated wetland acreage (not including open water area) are covered by a minimum of 85% of one or more of the following species:
 - a. reed canary grass (*Phalaris arundinacea*)
 - b. purple loosestrife (*Lythrum salicaria*)
 - c. common reed (*Phragmites australis*) or
 - d. buckthorn (*Rhamnus* spp.)
 - (iii) An IWLC comprised of open water that are not HQAR's.



Lake County Stormwater Management Commission
333 Peterson Road
Libertyville, IL 60048

Office number: 847/918-5260

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